2003 Deer Hunter Survey
Summary Statistics

August 2003 – January 2004
Hunting Season

(This report includes Unit 4 harvest data from January and doe harvest data from Prince of Wales Island in the survey even though those are federal hunting seasons.)

INTRODUCTION, METHODS, AND ANALYSIS

The annual deer hunter harvest mail survey was conducted by the Alaska Department of Fish and Game, Division of Wildlife Conservation to estimate the harvest of Sitka black-tailed deer and hunter effort in Southeast Alaska. The survey was mailed to a sample of hunters who obtained deer harvest tickets in Region I (Southeast Alaska) during the 2003-04 deer hunting season. Results of the survey contribute to management decisions and recommendations made by Region I wildlife biologists to the Alaska Board of Game. They are also used by the U.S. Forest Service to help determine how logging and other land management decisions affect deer populations and hunting. This information is also used by the Federal Regional Advisory Council and Federal Subsistence Board when evaluating federal subsistence hunting regulations.

Form – As in recent years, the survey asked hunters to be specific in describing the locations (islands, bays, shore and/or drainages) where they hunted deer. Hunters were also asked if they participated in the state proxy or federal designated hunter programs and the number of deer they harvested for others under those programs. In addition, hunters were also asked if they participated in the Prince of Wales Island Federal Subsistence hunt.

Distribution –Approximately 33% of the deer hunters hunting in Southeast Alaska who obtained deer harvest tickets were sent surveys. Hunters are randomly selected to be surveyed, within a community-based strata. In addition, the smaller communities of Prince of Wales island were sampled at approximately 100% this year, to gather information about the POW federal subsistence hunt.

Response – The overall response rate of those who received surveys was 59%, which is 1% higher than last year. Because response rates varied by community, the responses received from each community were multiplied by an expansion factor to calculate estimates for all hunters possessing deer harvest tickets in the community. The higher the sample fraction and percentage of responses from a community, the lower the expansion factor. The higher a community's response rate, the more likely the data represent actual hunting effort and success of all deer hunters with in that community.

Kill location – The percentage of hunters who described kill location specifically enough to be assigned to a Game Management Unit (GMU), island, major hunt area, or Wildlife Analysis Area (WAA) was 99.3%. When kill location was not identified specifically enough to be assigned to a GMU, island, major hunt area, or WAA, they are reported as unknown or missing in the summary. In the past (prior to 1996), when hunters were provided a map to code hunt locations, 99% of responding hunters reported hunt locations down to the scale of WAA. In the 2003 survey, without a map, the percentage of hunters that gave detailed enough information to code hunt locations to GMUs was slightly lower than last year. For GMUs the percentage was 99.3%, for islands it was 97%. The percentage giving enough detail to code to major hunt area decreased slightly to 94%. The percentage of those providing sufficient information for coding to WAAs decreased from the previous year to 86.7% in 2003.

Results

Harvest –This year's survey results are notable in that even though the reported region-wide hunting effort was the 2nd lowest in 20 years, the average number of days required to harvest a deer was equivalent to the lowest on record. Consequently, the overall harvest of deer was not substantially lower than the long-term average. Total deer harvest for the 2003 season is estimated to be 11,180, an increase of about 2,606 (30%) from the previous season but 1,181 (9%) less than the average for the previous 20 years. Hunter numbers of 7,028 were 2% higher than last year but 12% lower than the long-term average of 7,994. The hunter success rate was 66%, three percent higher than the long-term average. The average hunter spent 4.6 days hunting this year; 1.3 days less than the long-term average of 5.9 days. On average, hunters harvested a deer every 2.9 days afield, a rate equivalent to the highest on record (1990 also 2.9 days/deer) and 1.1 days less than the long-term average of 4.0 days per deer. The total number of hunter days afield (32,420) decreased over last years hunting season and remains 30% below the long-term average. This is the lowest level of hunter effort since 1980. The average number of deer killed per hunter was 1.6, roughly equivalent to the long-term average of 1.5 deer/hunter.

Regionwide, 26% of the deer harvest was taken by hunters using highway vehicles or ATVs as their primary means of transportation to and from hunting areas. That is down from the 36% using motorized road vehicles in 2002 and also less than percentages using vehicles in 2001 (34%). The percentage of deer harvested by boat hunters increased to 63% as compared to 2002 (54%) and 2001 (57%). Hunters using airplanes to access hunting areas took 8% of the deer in 2003.

Proxy and designated hunters – More hunters reported being state proxy or federal designated hunters than in 2002 and they reported taking almost 30% more deer. An estimated 172 state proxy hunters from at least 10 communities took a total of 300 deer with a 76% success rate in 2003. That compares to 110 hunters, 231 deer and a 77% success rate in 2002. The top 3 communities, with respect to number of proxy hunters, were Juneau (42 hunters), Petersburg (40 hunters) and Hoonah (25 hunters); the remaining communities had less than 20 hunters and included, Craig, Ketchikan, Klawock, Sitka, Wrangell, Yakutat and "other non-southeast Alaska communities.".

Weather: The winter of 2003-04 was characterized by relatively average snowfall conditions (Juneau reporting 94% of average snowfall). However, snowfall averages for northern southeast Alaska during November 2003, were 218% above normal, facilitating excellent late-fall hunting conditions in many areas. Nevertheless, winter conditions during the remainder of the season were characterized by typical, coastal freeze-thaw weather patterns and overall snow accumulation did not significantly deviate from normal.

Results by Game Management Unit

GMU 1A (Revillagigedo and Gravina islands, Cleveland Peninsula, and Misty Fjords mainland) – An estimated total unit-wide harvest of 211 deer in 2003 was lower than the previous year (251 deer) and substantially below the long-term average of 535 for the unit. On average, hunters spent 7.1 days afield per deer harvested in GMU 1A, an increase in hunter success rate as compared to 2002 (8.9 days/deer). An estimated 29% of hunters used highway vehicles or ATV's to harvest deer while 64% used boats to access hunting areas.

The **Gravina Island** harvest in 2003 of 27 deer was is lower than 2002 (50 deer) and much lower than the long-term average of 134 deer. However, the number of hunters on Gravina Island also decreased in 2003 (132 hunters) as compared to 2002 (178 hunters). Nevertheless, the number of days spent afield per deer on Gravina was higher in 2003 (11.0) than in 2002 (7.8). The 2003 hunter success rate on Gravina is among the lowest reported for any island in southeast Alaska.

There was no reported deer harvest on the **Cleveland Peninsula** this year, the eighth consecutive year of very low harvest for the area. A total of 59 hunter days by 34 hunters were spent on the Cleveland Peninsula in 2003.

There was also no reported harvest of deer on **Misty Fjords mainland** areas; the long-term average for this area is 12 deer.

The number of hunters using **Revillagigedo (Revilla) Island** in 2003 (416 hunters) was roughly equivalent to 2002 (409 hunters). However, the total number of days hunters spent afield decreased from 1,560 in 2002 to 1,054 in 2003. The resulting harvest of 169 deer in 2003 was lower than the 2002 harvest (193 deer) but the hunter success rate was higher in 2003 (6.2 days/deer) than in 2002 (8.1 days/deer).

GMU 2 (Prince of Wales and neighboring islands) – The GMU 2 harvest for 2003 was 1,783 deer, an 18% decrease as compared to 2002 (2,169 deer). Harvest on **Prince of Wales (POW) Island** in 2003 was 1,541 deer, 24% lower than the 2002 harvest of 2,028 deer. However, the number of hunters declined substantially in 2003 (1,385 hunters) as compared to 2002 (1,815) resulting in a slightly improved hunter success rate (2003: 4.7 days/deer; 2002: 5.1 days/deer). The total hunter days on POW was estimated at 7,294 in 2003, a 29% decrease as compared to 2002. Reported harvest of 58 does in 2003 was lower than the previous season (73 does) and the long-term average (99 does). Those using highway vehicles or ATVs as their main mode of transport once again took 74% of the harvest in GMU 2, substantially higher than the regional average (26%).

Hunters from 22 different Alaskan communities (13 from POW) participated in the 2003 GMU 2 deer harvest. An estimated 675 hunters (44% of the total) were residents of POW island. POW residents spent 3,501 days hunting and harvested 1,102 deer (62% of the total). The POW resident hunter success rate for GMU 2 was estimated at 3.2 days per deer, a substantially higher success rate than the overall combined (resident and non-resident) estimate for 2003 of 4.5 days/deer.

A majority (67%) of GMU 2 hunters resided in 4 Alaskan communities (Craig, Klawock, Thorne Bay and Ketchikan); 11% of hunters were not residents of Alaska. The estimated total number of hunters residing in Craig was lower in 2003 (283 hunters) than in 2002 (322 hunters), and hunter success higher in 2003 (3.2 days/deer) than in 2002 (3.8 days/deer). An estimated total of 152 Klawock residents hunted in GMU 2 during 2003, 24% less than in 2002 (200 hunters). Hunter success for Klawock hunters greatly improved in 2003 and was estimated at 1.9 days/deer, as compared to 7.6 days/deer in 2002. GMU 2 hunters from Thorne Bay totaled 124 in 2003, 34% fewer than in 2002 (188 hunters). Hunter success for Thorne Bay hunters was estimated at 3.8 days/deer, a higher rate than reported in 2002 (4.9 days/deer). A total of 462 Ketchikan residents hunted in GMU 2 in 2003, a 29% decline as compared to 2002. Hunter success for Ketchikan hunters in GMU 2 was estimated at 6.1 days/deer in 2003, a rate similar to 2002 (5.7 days/deer). Overall, for these 4 major communities, hunters residing on POW appeared to have a higher hunter success rate than those living in Ketchikan.

Elsewhere in Unit 2, on **Heceta Island**, 60 deer were reported taken, a slight increase as compared to 2002 (52 deer) but lower than the long-term harvest of 70 deer. On average hunters spent 2.8 days afield for each deer harvested on Heceta Island, an increased hunter success rate as compared to 2002 (3.6 days/deer). On **Suemez Island** 33 deer were harvested in 2003, a substantial increase as compared to 2002 (5 deer). Hunters spent 3.6 days/deer on Suemez in 2003. **Dall and Long Island** hunters reported 41 deer taken in 2003, a substantial increase as compared to 2002 (11 deer). However, the number of hunters also increased from 12 in 2002 to 28 in 2003. An estimated 30 deer were harvested in the **"Outer" islands** (including Noyes, Baker, and Lulu) in 2003, roughly equivalent to 2002 (33 deer). Hunter success rates were likewise similar (2003: 1.6 days/deer; 2002: 1.87 days/deer. On **Kosciusko Island**, the number of deer harvested increased in 2003 (32 deer) as compared to 2002 (18 deer) with hunter success rates also increasing (2003: 3.5 days/deer; 2002: 7.1 days/deer).

GMU 1B and 3 (central mainland and islands) – Eighty-two deer were harvested on the central mainland (GMU 1B) in 2003, an increase of 48 deer as compared to the 2002 season. Hunter success rate was also higher in 2003, with hunters taking an average of 6.5 days per deer as compared to 2002 (9.7 days/deer) and 2001 (12.5 days/deer). The GMU 3 harvest of 901 represents an increase of 277 deer as compared to 2002 (624 deer); 853

deer were harvested in 2001. On average, hunters required 4.8 days to harvest a deer in 2003. This represents a higher success rate than 2002 (7.4 day/deer) and 2001 (6.3 days/deer).

Within Unit 3, the **Zarembo Island** harvest of 256 in 2003 was lower than the 2002 harvest (277 deer) and the 10-year average harvest (334 deer). On **Wrangell Island**, the 2003 harvest of 70 was roughly equivalent to the long-term average (65 deer) but substantially higher than the 2002 harvest of 29 deer. Harvest on **Mitkof/Woewodski** Islands (94 deer) was 46% higher than 2002 (64 deer) but still lower than the long-term average harvest of 121. The **Kupreanof Island** deer harvest of 373 was the highest ever reported for that locality, and was more than double the harvest for 2002 (149 deer) and substantially higher than the long-term harvest (205). On average, hunters spent 3.7 days afield for each deer harvested on Kupreanof Island. The percent of the harvest in GMU 3 that came from hunters using highway vehicles or ATVs as their main mode of transport declined from 2002 (47%) to 42% in 2003.

GMU 1C (northern mainland, Douglas, Shelter, and Lincoln islands) – Unit-wide, harvest increased in 2003 (467 deer) as compared to 2002 (358 deer). Estimated harvest on **Douglas Island** was 401 deer, an increase of 39% from 2002 and 32% higher than the long-term average (303 deer). Percentage of bucks in the harvest was 69%, a nine percent increase over 2002. The estimated number of hunters increased by 16% to 776, and hunter days increased to 2,590 (19% increase). Because of its proximity to Juneau and having road access to about half the island, Douglas is consistently the most heavily hunted island per square mile in Southeast Alaska. In 2003, it ranked fifth in number of reported hunter days per island behind the much larger islands Prince of Wales, Chichagof, Admiralty, and Baranof. Douglas' hunter success rate increased to 35% in 2003, as compared to 27% in 2002. Douglas hunters spent 6.5 days afield for each deer harvested, 1 less than 2002.

Harvest on **Shelter and Lincoln islands** decreased 45% to 33 deer from 2002, which is 46% below the long-term average. This reduction in harvest can be partly explained by the reduction in number of hunters, 99 this year compared to 111 last year (11% decrease.) Percentage of does taken from those islands was roughly equivalent to last year (2002: 42%, 2003: 43%).

The buck-only harvest on the **Juneau mainland** increased to 33 deer, a substantial increase relative to last year (10 deer) and the long term average (12 deer).

GMU 4 (Admiralty, Baranof, Chichagof and neighboring islands) – Estimated GMU 4 harvest increased 49% in 2003 (7621 deer) as compared to 2002 season (5117 deer). The harvest on **Admiralty Island** was 50% higher than during the 2002 season. On **Baranof island**, the harvest was 33% higher, and on the **Chichagof/Yakobi** islands the harvest was 50% higher than the previous season. The 2003 **Kruzof Island** harvest of 325 was roughly equivalent to last year (317). Overall, the deer harvests on Admiralty and Chichagof were higher than the long term averages (7% and 27%, respectively). While the Baranof and Kruzof Island harvests were lower than the long-term average (23% and 5%, respectively). Sitka hunters reported about 1,062 more deer harvested in 2003 and 2002 (a 62% increase) with a total reported harvest of 2,763 deer.

Regional Outlook – The number of deer hunters, hunter success rates, and the total number of deer harvested increased in 2003, as compared to 2002. Nevertheless, hunting effort was among the lowest reported for southeast Alaska. This may be partly explained by the reduced effort required to harvest a deer in 2003, which was equivalent to the lowest on record. Although, it is also possible that interest in deer hunting may be declining, paralleling nationwide hunting trends.

Fall/winter weather conditions play an important role in determining the distribution of deer and consequently the effort required for hunters to harvest deer. In November 2003, monthly average snowfall in northern southeast Alaska was over 200% of normal. These conditions resulted in higher concentrations of deer at more accessible, lower elevations and also good tracking conditions for hunters afield. Not surprisingly, more than twice as many deer were harvested in November (39% of the total) than any other month. Despite the unusually high November

snow accumulation, the winter of 2003-2004 was characterized by typical freeze-thaw weather patterns and overall winter snow accumulation was slightly below the long-term average. Consequently, we do not expect that deer populations in subsequent years to experience any strong, negative effects associated with the relatively average winter of 2003-2004.